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PATENT APPLICATION

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IN THE
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Inventor(s): John A. Devos

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Application No.: 10/698,750

Examiner: Abbas I. Abdulsalam

Filing Date: 10/31/2003

Group Art Unit: 2629

Title: Display with interlockable display modules

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 3/26/2009.

☒ The fee for filing this Appeal Brief is \$540.00 (37 CFR 41.20).

☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below.

☐ 1st Month
\$130

☐ 2nd Month
\$490

☐ 3rd Month
\$1110

☐ 4th Month
\$1730

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of \$ 540 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Respectfully submitted,

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First Named Applicant: John A. Devos	
Application No.: 10/698,750 (CONF 3212)	Group Art Unit: 2629
Filed: 10/31/2003	Examiner: Abbas I. Abdulsalam
Title: Display with interlockable display modules	
Attorney Docket No.: 200310702-1	

Assistant Commissioner for Patents
Washington, D.C. 20231

APPEAL BRIEF

This Appeal Brief is organized in accordance with the requirements set forth in 37 CFR 41.37(c).

Real party in interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

Related appeals and interferences

There are no related appeals or interferences to the present patent application.

Status of claims

Claims 1-60 were filed in the present patent application. Claim 52 was amended during prosecution; none of the other claims were amended or cancelled during prosecution. Therefore, all claims 1-60 remain pending in the present patent application. Claims 15-19 have been allowed, whereas claims 8-10 have been objected to as containing allowable subject matter, but which depend from rejected base independent claims. Claims 1-7, 11-14, and 20-60 have been rejected. The rejection of claims 1-7, 11-14, and 20-60 is subject to this appeal.

Status of amendments

None of the claims were amended in the final office action response of February 26, 2009, which was responsive to the final office action of December 26, 2008. The Examiner did indicate in the advisory action of March 19, 2009, that “the proposed amendments will be entered” (see box 7 under AMENDMENTS on page 2 of the advisory action). However, Applicant is uncertain as to what proposed amendments the Examiner is referring to, insofar as in the final office action response of February 26, 2009, Applicant did not propose any amendments. In any case, then, there are no unentered claim amendments pending in the present patent application.

Summary of claimed subject matter

There are eight independent claims, claims 1, 15, 20, 27, 38, 51, 52, and 58, pending in the present patent application.

Claim 1

Claim 1 is directed to a display (display 100 of FIG. 1; p. 3, ll. 25-27). The display includes a plurality of display modules that are interlockable to form the display (modules 102 of FIG. 2; representative display module 400 of FIGs. 4 and 5; p. 3, ll. 25-27; p. 10, ll. 2-5; p. 12, ll. 10-11). Each display module includes at least one user-viewable display element disposed in the display module, where each of a plurality of pixels of the display corresponds to at least one of the display elements (display element 416 of FIGs. 4 and 5; p. 10, ll. 7-10 & ll. 14-16; p. 12, ll. 11-12). Each display module includes at least one connector disposed in the display module to at least one of receive power from and provide power to a first adjacent display module (connectors 408 and 410 of FIGs. 4 and 5; p. 10, ll. 25-32; p. 12, ll. 11-12). Each display module includes at least one receptor disposed in the display module and that is receptive to a connector of a second adjacent display module (receptors 412 and 414 of FIGs. 4 and 5; p. 11, ll. 7-12; p. 12, ll. 11-13).

Claim 15

Claim 15 is directed to a display (display 100 of FIG. 1; p. 3, ll. 25-27). The display includes a plurality of display modules that are interlockable to form the display (modules 102 of FIG. 2; representative display module 400 of FIGs. 4 and 5; p. 3, ll. 25-27; p. 10, ll. 2-5; p. 12, ll. 10-11). Each display module includes at least one user-viewable display element disposed in the display module, where each of a plurality of pixels of the display corresponds to at least one of the display elements (display element 416 of FIGs. 4 and 5; p. 10, ll. 7-10 & ll. 14-16; p. 12, ll. 11-12). Each display module includes at least one connector disposed in the display module to at least one of receive power from and provide power to a first adjacent display module (connectors 408 and 410 of FIGs. 4 and 5; p. 10, ll. 25-32; p. 12, ll. 11-12). Each display module includes at least one receptor disposed in the display module and that is receptive to a connector of a second adjacent display module (receptors 412 and 414 of FIGs. 4 and 5; p. 11, ll. 7-12; p. 12, ll. 11-13). Each display module includes a power mechanism to partially self-power the display module, such that remaining power needed by the display module is received from other of the plurality of display modules (power mechanism 506 of FIG. 5; p. 13, l. 26, through p. 14, l. 2).

Claim 20

Claim 20 is directed to a display (display 100 of FIG. 1; p. 3, ll. 25-27). The display includes a plurality of display modules that are interlockable to form the display (modules 102 of FIG. 2; representative display module 400 of FIGs. 4 and 5; p. 3, ll. 25-27; p. 10, ll. 2-5; p. 12, ll. 10-11). Each display module has a front, at least one first side, and at least one second side (front 406, sides 402, and sides 404 of FIG. 4; p. 10, ll. 5-7). Each display module includes at least one display element viewable from the front of the display module, where each of a plurality of pixels of the display corresponds to at least one of the display elements (display element 416 of FIGs. 4 and 5; p. 10, ll. 7-10 & ll. 14-16; p. 12, ll. 11-12). Each display module includes at least two connector mounted on the first sides of the display module to at least one of receive power from and provide power to first adjacent display modules (connectors 408 and 410 of FIGs. 4 and

5; p. 10, ll. 25-32; p. 12, ll. 11-12). Each display module includes at least two receptor receptors mounted on the second sides of the display module and that are receptive to connectors of second adjacent display modules (receptors 412 and 414 of FIGs. 4 and 5; p. 11, ll. 7-12; p. 12, ll. 11-13).

Claim 27

Claim 27 is directed to a display module for a multiple-display module display (display module 400 of FIGs. 4 and 5; p. 3, ll. 25-27; p. 10, ll. 2-5; p. 12, ll. 10-11). The display module has a front, at least one first side, and at least one second side (front 406, sides 402, and sides 404 of FIG. 4; p. 10, ll. 5-7). The display module includes at least one display element viewable from the front of the display module, where each of a plurality of pixels of the display corresponds to at least one of the display elements (display element 416 of FIGs. 4 and 5; p. 10, ll. 7-10 & ll. 14-16; p. 12, ll. 11-12). The display module includes at least two connector mounted on the first sides of the display module to at least one of receive power from and provide power to first adjacent display modules (connectors 408 and 410 of FIGs. 4 and 5; p. 10, ll. 25-32; p. 12, ll. 11-12). The display module is interlockable with the first adjacent display modules (p. 3, ll. 25-27). The display module includes at least two receptor receptors mounted on the second sides of the display module and that are receptive to connectors of second adjacent display modules (receptors 412 and 414 of FIGs. 4 and 5; p. 11, ll. 7-12; p. 12, ll. 11-13). The display module is interlockable with the second adjacent display modules (p. 3, ll. 25-27).

Claim 38

Claim 38 is directed to a system (system 300 of FIG. 3; p. 6, ll. 30-31). The system includes a display information source to generate display information (source 302 of FIG. 3; p. 6, ll. 31-32; p. 7, ll. 3-7). The system includes a display to display the information (display 100 of FIG. 3; p. 6, ll. 30-31; p. 7, ll. 19-20). The display has a plurality of interlockable display modules to each display a portion of the display information (modules 102 of FIG. 3; p. 3, ll. 25-26; p. 7, ll. 1-3; p. 4, ll. 2-4). The display modules are connectable to one another by at least two

connectors of each display module that at least distribute power among the display modules (connectors 408 and 410 of FIGs. 4 and 5; p. 10, ll. 25-32; p. 12, ll. 2 & 11-12).

Claim 51

Claim 51 is directed to a system (system 300 of FIG. 3; p. 6, ll. 30-31). The system includes a display information source to generate display information (source 302 of FIG. 3; p. 6, ll. 31-32; p. 7, ll. 3-7). The system includes modular, interlocking means for displaying the display information (interlocking display modules 102 of FIG. 3 correspond to the means; p. 3, ll. 25-26; p. 7, ll. 1-3; p. 4, ll. 2-4).

Claim 52

Claim 52 is directed to a method (method 600 of FIG. 6; p. 14, ll. 4-5). The method receives display information from a display information source by a designated display module of a plurality of interlockable display modules of a display (part 604 of FIG. 4; p. 14, ll. 13-14). The method conveys the display information to other of the plurality of display modules by the designated display module (part 606 of FIG. 6; p. 14, ll. 14-16). The method displays a portion of the display information by the designated display module based on a configuration of the designated display module relative to the other of the plurality of display modules (part 608 of FIG. 6; p. 14, ll. 16-18). The method distributes power among the plurality of interlockable display modules of the display (p. 10, ll. 29-32; p. 12, ll. 2 & 11-12).

Claim 58

Claim 58 is directed to a method (method 700 of FIG. 7; p. 14, ll. 24-25). The method provides a plurality of interlockable display modules (part 702 of FIG. 7; p. 14, ll. 25-26). Each module has at least two connectors mounted on sides thereof to at least receive power from and provide power to adjacent display modules (connectors 408 and 410 of FIGs. 4 and 5; p. 10, ll. 25-32; p. 12, ll. 11-12). Each module has at least two receptors mounted on sides thereof that are receptive to connectors of the adjacent display modules (receptors 412 and 414 of FIGs. 4 and

5; p. 11, ll. 7-12; p. 12, ll. 11-13). The method connects the plurality of interlockable display modules together to form a display having a configuration (part 704 of FIG. 7; p. 14, ll. 27-30).

Grounds of rejection to be reviewed on appeal

For the purposes of this appeal, there is a total of two issues, or grounds of rejection to be reviewed on appeal. The first ground of rejection is whether claims 1-7, 11-14, and 51-57 have been properly rejected under 35 USC 103(a) as being unpatentable over Ezumi (7,197,329). The second ground of rejection is whether claims 20-50 and 58-60 have been properly rejected under 35 USC 103(a) as being unpatentable over Ezumi in view of Asano (6,636,181).

Argument

I. First ground of rejection

Applicant respectfully submits that the Examiner has erred in rejecting claims 1-7, 11-14, and 51-57 under 35 USC 103(a) as being unpatentable over Ezumi. In particular, Applicant respectfully submits that independent claims 1, 51, and 52 are patentable over Ezumi. As such, claims 2-7, 11-14, and 53-57 are patentable at least because they depend from patentable base independent claims.

Applicant discusses independent claim 1 separately from independent claims 51 and 52 insofar as the first ground of rejection is concerned. That is, Applicant has divided independent claims 1, 51, and 52 into two groups insofar as the first ground of rejection is concerned. The first group includes just independent claim 1, whereas the second group includes independent claims 51 and 52.

I.A. First ground of rejection as to claim 1

Claim 1 recites that each display module of the display comprises “at least one connector displayed in the display module.” The at least one connector is “to at least one of receive power

from and provide power to a[n] adjacent display module.” Applicant submits that these limitations are not suggested in view of Ezumi, such that the Examiner has erred in concluding that these limitations are suggested in view of Ezumi. Applicant notes that a claimed invention has to be considered “as a whole” (MPEP sec. 2141.02.I.). “Distilling an invention down to the ‘gist’ or ‘thrust’ of an invention disregards the requirement of analyzing the subject matter ‘as a whole.’” (MPEP sec 2141.02.II., citing *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)) “All words in a claim must be considered in judging the patentability of that claim against the prior art.” (*Id.*, citing *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970))

I.A.1. What Ezumi suggests

Ezumi suggests a wireless telephone system in FIG. 1. The wireless telephone system includes a telephone base station 100 that has a display 101. The telephone base station 100 further has a wire communication line 130 to connect the base station 100 to a telephone line. The telephone base station 100 further includes a corded handset 103. The wireless telephone system of Ezumi itself also includes a cordless handset 110 that has a display 111. The cordless handset 110 wirelessly communicates with the telephone base station 100 via an antenna 113 of the cordless handset 110 and an antenna 104 of the telephone base station 100.

I.A.2. First reason why claim 1 is not suggested in view of Ezumi

Claim 1 recites that *each* display module comprises “at least one connector” disposed in the display module. Applicant submits that Ezumi does not suggest *each* display module as having at least one connector, in contradistinction to the claimed invention. The Examiner has identified in Ezumi the wire communication line 130, which connects the telephone base station 100 to a public telephone line (see col. 6, ll. 54-55), as the connector of the telephone base station 100, and thus the connector of the display 101 that corresponds to one of the display modules of claim 1.

However, Ezumi in fact does not suggest that the cordless telephone handset 110/display 111 has a line 130 like the telephone base station 100/display 101 does, such that *each* display module in Ezumi does not have a connector, in contradistinction to the invention. This makes sense, because the purpose of a cordless handset 110 is of course that you do not have to be tethered by a physical wire to make telephone calls. Rather, the idea is that just the base station 100 is physically connected to a telephone line, and the base station 100 wirelessly communicates with the cordless handset 110. In contradistinction to the invention, then, Ezumi suggests that *each* display module does *not* comprise at least one connector; in particular, the display 111 of the cordless handset 110 does not comprise a connector. Therefore, claim 1 is not *prima facie* obvious and unpatentable over Ezumi for just this reason.

I.A.3. Second reason why claim 1 is not suggested in view of Ezumi

Claim 1 recites that the at least connector of each display module is to “at least one of receive power . . . and provide power.” Applicant submits that Ezumi does not suggest that the connectors of the display modules not receive power and/or provide power. The Examiner has stated that the wire communication line 130 in Ezumi that connects the telephone base station 100 to a public telephone line receives power because “it is inherent that the wired communication line is plugged into a power source,” (office action of August 4, 2008, p. 3), such that the base station 101/display 101 has a connector (the line 130) that receives power. Applicant disagrees, and notes that the Examiner has not provided any evidentiary support that the wired communication line is plugged into a power source.

Furthermore, even if the communication line 130 is at some point plugged into a power source, this does not mean that the communication line 130 is the mechanism by which the display 101 of the base station 100 “receives power,” in contradistinction to the invention. The Examiner has not identified any type of cordless telephone system that relies upon a wired communication line connecting the system to a public telephone line as the mechanism by which the telephone system receives power to power a display of the system. Thus, the Examiner has failed to provide evidence to support his explicit and implicit contentions that (1) the wire communication line 130

is plugged into a power source, and (2) the display 101 of the base station 100 receives power by virtue of the line 130 being plugged into such a power source.

Indeed, every cordless telephone system that Applicant is aware of has both a power connector that plugs into a power outlet, as well as a wired communication line that plugs into a telephone jack. Therefore, it is incorrect to say, because the wired communication line 130 of Ezumi that connects the base station 100 to a telephone line may itself be plugged into a power source, that this means that the display 101 of the base station 100 receives power via the wired communication line 130. For just this reason, too, claim 1 is not *prima facie* obvious and unpatentable over Ezumi.

1.A.4. Third reason why claim 1 is not suggested in view of Ezumi

Claim 1 does not just recite that the connector of a display module is to receive power and/or to provide power, but rather recites that the connector of a display module is to receive power from and/or provide power to *an adjacent display module*. However, as suggested by Ezumi, the wire communications line 130 does not receive power from and/or provide power to *an adjacent display module*, in contradistinction to claim 1. Rather, the wire communications line 130 connects telephone base station 100, including the display 101, to a public telephone line, and not to the other display module as suggested by Ezumi, the cordless telephone handset 110 including the display 111. Therefore, the identified connector of the telephone base station 100 including the display 101 as suggested by Ezumi that corresponds to a display module of claim 1 does not receive power from or provide power to the cordless telephone handset 110 including the display 111 that corresponds to another display module of claim 1, in contradistinction to claim 1. Therefore, claim 1 is not *prima facie* obvious and unpatentable over Ezumi for just this reason, too.

1.A.5. Ezumi teaches away from Examiner's proposed modification of Ezumi

In response to Applicant's arguments, the Examiner has stated that "it is clear that the displays (101, 111) are wirelessly connected through antennas (104, 113), and [one] of ordinary

skill in the art would have ascertained [that] the alternate wired connection between the displays (101, 111) is possible through a wired communication line 130 with communication interface (I/F) 210 (see FIG. 2)” (final office action of December 26, 2008, p. 3). In this respect, the Examiner states that “Ezumi suggests that the use [of] the displays [can be applied] to any other type[] of wireless communication apparatus (col. 11, ll. 3-11)” such that “[c]orrespondingly, it is clear that [an] alternate use of wired type of communication is also possible” (final office action of December 26, 2008, p. 3).

Applicant contends that the Examiner’s interpretation and modification of Ezumi is incorrect in at least two ways. These contentions are based in the supposition that a claimed invention is not obvious where the prior art *teaches away* from modification to yield the invention. In *KSR Int’l Co. v. Teleflex, Inc.*, 550 US 298 (2007), the Supreme Court has stated that “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is likely to be nonobvious” (*KSR*, slip opinion at 12), referring to its earlier decision *United States v. Adams*, 383 US 39 (1966). Applicant notes that one type of teaching away is that “[t]he proposed modification cannot render the prior art unsatisfactory for its intended purpose” (*In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

First, the Examiner’s statement that Ezumi’s suggestion that any wireless communication apparatus can be employed means that a wired type of communication is also possible within Ezumi is incorrect. Ezumi does indeed state that any other type of *wireless* communication apparatus can be employed, in column 11, lines 3-11, as stated by the Examiner. However, the Examiner somehow construes this statement to mean that *wired* types of communication can also be employed, since modifying Ezumi to yield the claimed invention requires that the cordless handset 110 be connected in a wired manner to the telephone base station 100. This logical leap by the Examiner is incorrect, though. Ezumi states that it “provide[s] a *wireless* communication apparatus” (Abstract). Ezumi states that its invention “relates to a wireless communication apparatus” and “a cordless telephone” (col. 1, ll. 9-11).

Thus, if the *cordless* telephone handset of Ezumi is connected in a wired manner to the base station, as suggested by the Examiner, then the telephone handset is no longer *cordless* in

any way, and is in fact a *corded* handset. As such, the communications apparatus of FIG. 1 of Ezumi is no longer a *wireless* communications apparatus. Therefore, modifying Ezumi as suggested by the Examiner results in a wireless communications apparatus having a cordless handset that is no longer wireless, and which no longer has a cordless handset! It is telling in this respect that Ezumi states that it is amenable to other types of *wireless* communication, as opposed to, for instance, other types of communications such as *wired* communication, as the Examiner incorrectly suggests.

Indeed, Ezumi *already* has a corded telephone handset 103 connected in a wired manner to the telephone base station 100 in FIG. 1. By connecting the cordless handset 110 to the base station 100 in a wired manner, per the Examiner's suggestion, the base station 100 would have *two* corded handsets and *no* cordless handsets. However, surely a *wireless* communications apparatus has at least *one* cordless handset, and indeed, it does not make any sense to have a telephone with *two* corded handset. For all of these reasons, then, Ezumi teaches away from the Examiner's proposed modification of Ezumi to yield the claimed invention – modifying Ezumi in accordance with the Examiner's suggestion results in a telephone system that is no longer *wireless* (as Ezumi is completely directed to) and no longer has a cordless handset (as is required in a *wireless* telephone system, and also as to which Ezumi is completely directed to).

Second, the Examiner's inclusion of a line interface 210 and a wired communication line 130 within the cordless handset 110 of Ezumi so that the handset 110 can receive power from or provide power to the base station 100 via the base station's corresponding line interface 210 and wired communication line 130 results in the telephone system of Ezumi no longer being satisfactory for its intended purpose, to make and receive telephone calls. Note that the wired communication line 130 in Ezumi connects the telephone base station 100, including the display 101, to a public telephone line. The way that cordless telephone systems work is that you have a base station that connects to a telephone line (via the wired communication line 130/line interface 210), and this base station then wirelessly transmits the information received over the telephone line to a cordless handset.

Now, the Examiner suggests that you can have a comparable wired communication line 130/line interface 210 within the cordless handset 110, presumably so that there can be a wired line connecting the line interface 210 of the handset with the line interface 210 of the base station 100, via their corresponding communication lines 130. However, connecting the handset 110 with the base station 100 in this way would mean that the line interface 210 of the base station 100 is no longer connected to a telephone line, but is instead connected to the handset 100 to read on the claim language. As such, you have a telephone that cannot make or receive calls, since the telephone is no longer connected to a telephone line! Therefore, Ezumi teaches away from the Examiner's proposed modification of Ezumi to yield the claimed invention, because modifying Ezumi in this manner results in a telephone system that cannot make or receive telephone calls, rendering Ezumi unsatisfactory for its intended purpose.

I.B. First ground of rejection as to claims 51 and 52

Claim 51 recites that power is distributed among the (interlocking) means, whereas claim 52 recites that power is distributed among the plurality of interlockable display modules. Applicant submits that these limitations are not suggested in view of Ezumi, such that the Examiner has erred in concluding that these limitations are suggested in view of Ezumi in view of Ezumi. As noted above, a claimed invention has to be considered "as a whole," and distilling an invention down to its gist or thrust ignores this requirement. Likewise, all words in a claim must be considered in judging the patentability of the claim against the prior art.

Ezumi does not distribute power among its interlocking/interlockable means/display modules. As noted above in relation to claim 1, the Examiner has correlated the telephone base station 100 of Ezumi as one display module of the invention, and the cordless telephone handset 110 as another display module of the invention. However, power is not distributed among the base station 100 and the telephone handset 110, in contradistinction to the claimed invention.

More specifically, as noted above in relation to claim 1, the Examiner has stated that the wire communications line 130 in Ezumi connects the telephone base station 100 to a public telephone line can receive power because it is inherent that this line 130 is plugged into a power

source. Even if that were true, the wire communications line 130 does not distribute power among the interlocking/interlockable means/display modules of Ezumi – i.e., the base station 100 and the cordless handset 110 – in contradistinction to claims 51 and 52. Rather, the wire communications line 130 connects telephone base station 100, including the display 101, to a public telephone line, and not to the other display module as suggested by Ezumi, the cordless telephone handset 110 including the display 111. As such, power is not *distributed* among the base station 100 and the telephone handset 110 in Ezumi, such that claims 51 and 52 are not *prima facie* obvious and unpatentable over Ezumi.

II. Second ground of rejection

Applicant respectfully submits that the Examiner has erred in rejection claims 20-50 and 58-60 under 35 USC 103(a) as being unpatentable over Ezumi in view of Asano. In particular, Applicant respectfully submits that independent claims 20, 27, 38, and 58 are patentable over Ezumi in view of Asano. As such, claims 21-26, 28-37, 39-50, and 59-60 are patentable at least because they depend from patentable base independent claims. Applicant discusses the patentability of each of these independent claims separately, insofar as the second ground of rejection is concerned.

II.A. Second ground of rejection as to independent claim 20

Claim 20 recites the following claim language: (1) *each* display module comprising connectors; and, (2) the connectors to receive power from and/or provide power to an adjacent *display module*. This claim language of claim 20 is at least substantially similar to that of claim 1 that has been discussed above. In rejecting claim 20 over Ezumi in view of Asano, the Examiner has relied upon Ezumi in the same way in rejecting claim 1 over Ezumi alone. Insofar as Ezumi does not teach, disclose, or suggest the claim language for which it is being relied upon in the rejection of claim 20 over Ezumi in view of Asano, as has been discussed above in relation to claim 1, then Ezumi in view of Asano does not teach, disclose, or suggest all the claim language

of claim 20.¹ This is because *all* the words of claim 20 have to be considered in judging its patentability against the prior art.

II.B. Second ground of rejection as to independent claim 27

Claim 27 recites the following claim language: the connectors to receive power from and/or provide power to an *adjacent display module*. This claim language of claim 27 is at least substantially similar to that of claim 1 that has been discussed above. Furthermore, in rejecting claim 27 over Ezumi in view of Asano, the Examiner has relied upon Ezumi in the same way in rejecting claim 1 over Ezumi alone. Therefore, insofar as Ezumi does not teach, disclose, or suggest the claim language for which it is being relied upon in the rejection of claim 27 over Ezumi in view of Asano, as has been discussed above in relation to claim 1, then Ezumi in view of Asano does not teach, disclose, or suggest all the claim language of claim 27. This is because *all* the words of claim 27 have to be considered in judging its patentability against the prior art.

II.C. Second ground of rejection as to independent claim 38

Claim 38 recites the following claim language: the display modules connectable to one another by connectors to *distribute power among the display modules*. This claim language of claim 38 is similar to that of claim 1 that has been discussed above. Specifically, connectors that

¹ Applicant parenthetically notes that the references are not being attacked individually herein. Rather, Applicant's argument is that the proffered combination of references does not teach, disclose, or suggest all the claim language of claim 20, such that the references in combination do not render claim 20 nonobvious. In arguing why the combination of references does not teach, disclose, or suggest all the claim language of claim 20, Applicant focuses on a particular reference, Ezumi, in the same way that the Examiner has done. Insofar as this particular reference does not teach, disclose, or suggest the aspects of claim 20 as relied upon by the Examiner, the combination of references as a whole cannot teach, disclose, or suggest claim 20 in its entirety.

distribute power among the display modules as in claim 38 are akin to connectors of the display modules providing power to and/or receiving power from adjacent display modules as in claim 1 for the purposes of the present rejection, because this language of claim 1 provides for the distribution of power as recited in claim 38. In rejecting claim 38 over Ezumi in view of Asano, the Examiner has relied upon Ezumi in the same way in rejecting claim 1 over Ezumi alone. Therefore, insofar as Ezumi does not teach, disclose, or suggest the claim language for which it is being relied upon in the rejection of claim 38 over Ezumi in view of Asano, as has been discussed above in relation to claim 1, then Ezumi in view of Asano does not teach, disclose, or suggest all the claim language of claim 38. This is because *all* the words of claim 38 have to be considered in judging its patentability against the prior art.

II.D. Second ground of rejection as to independent claim 58

Claim 58 recites the following claim language: (1) *each* display module comprising connectors; and, (2) the connectors to receive power from and/or provide power to adjacent *display modules*. This claim language of claim 58 is at least substantially similar to that of claim 1 that has been discussed above. Furthermore, in rejecting claim 58 over Ezumi in view of Asano, the Examiner has relied upon Ezumi in the same way in rejecting claim 1 over Ezumi alone. Therefore, insofar as Ezumi does not teach, disclose, or suggest the claim language for which it is being relied upon in the rejection of claim 58 over Ezumi in view of Asano, as has been discussed above in relation to claim 1, then Ezumi in view of Asano does not teach, disclose, or suggest all the claim language of claim 58. This is because *all* the words of claim 58 have to be considered in judging its patentability against the prior art.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Michael Dryja", written over a horizontal line.

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May 22, 2009
Date

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Claims appendix

1. (original) A display comprising:
a plurality of display modules interlockable to form the display, each display module comprising:
at least one user-viewable display element disposed in the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements;
at least one connector disposed in the display module to at least one of receive power from and provide power to a first adjacent display module; and,
at least one receptor disposed in the display module and receptive to a connector of a second adjacent display module.
2. (original) The display of claim 1, wherein one of the plurality of display modules is a master display module and other of the plurality of display modules are slave display modules, the master display module communicating display information to each of the slave display modules that the at least one display element of the slave display module is to display.
3. (original) The display of claim 2, wherein the master display module determines a configuration of each slave display module relative to other of the plurality of display modules, to determine the display information to be communicated to the slave display module that the at least one display element of the slave display module is to display.
4. (original) The display of claim 2, wherein the master display module receives a configuration of each display module relative to other of the plurality of display modules from a user, to determine the display information to be communicated to the slave display module that the at least one display element of the slave display module is to display.

5. (original) The display of claim 1, wherein display information is communicated to each of the plurality of display modules, each display module determining which of the display information the at least one display element of the display module is to display.
6. (original) The display of claim 5, wherein each display module automatically self-determines a configuration of the display module relative to other of the plurality of display modules, to determine which of the display information the at least one display element of the display module is to display.
7. (original) The display of claim 5, wherein each display module receives a configuration of the display module relative to other of the plurality of display modules from a user, to determine which of the display information the at least one display element of the display module is to display.
8. (original) The display of claim 1, wherein each display module of the plurality of display modules is at least partially self-powered, such that remaining power needed by the display module is received from other of the plurality of display modules.
9. (original) The display of claim 8, wherein each display module is solar powered.
10. (original) The display of claim 8, wherein each display module is battery powered.
11. (original) The display of claim 1, wherein at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and connectable to other of the plurality of display modules while power is being provided to the plurality of display displays.
12. (original) The display of claim 1, wherein each display module is rectangular in shape.

13. (original) The display of claim 1, wherein the display is three-dimensional.
14. (original) The display of claim 1, wherein the display has a shape that is independent of a shape of each display module.
15. (original) A display comprising:
a plurality of display modules interlockable to form the display, each display module comprising:
at least one user-viewable display element disposed in the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements;
at least one connector disposed in the display module to at least one of receive power from and provide power to a first adjacent display module;
at least one receptor disposed in the display module and receptive to a connector of a second adjacent display module; and,
a power mechanism to partially self-power the display module, such that remaining power needed by the display module is received from other of the plurality of display modules.
16. (original) The display of claim 15, wherein one of the plurality of display modules is a master display module and other of the plurality of display modules are slave display modules, the master display module communicating display information to each of the slave display modules that the at least one display element of the slave display module is to display.
17. (original) The display of claim 15, wherein display information is communicated to each of the plurality of display modules, each display module determining which of the display information the at least one display element of the display module is to display.

18. (original) The display of claim 15, wherein the power mechanism of each display module is a solar power mechanism.

19. (original) The display of claim 15, wherein the power mechanism of each display module is a battery mechanism.

20. (original) A display comprising:

a plurality of display modules interlockable to form the display, each display module having a front, at least one first side, and at least one second side, and comprising:

at least one display element viewable from the front of the display module, each of a plurality of pixels of the display corresponding to at least one of the display elements;

at least two connectors mounted on the first sides of the display module to at least one of receive power from and provide power to first adjacent display modules; and,

at least two receptors mounted on the second sides of the display module and receptive to connectors of second adjacent display modules.

21. (original) The display of claim 20, wherein one of the plurality of display modules is a master display module and other of the plurality of display modules are slave display modules, the master display module communicating display information to each of the slave display modules that the at least one display element of the slave display module is to display.

22. (original) The display of claim 20, wherein display information is communicated to each of the plurality of display modules, each display module determining which of the display information the at least one display element of the display module is to display.

23. (original) The display of claim 20, wherein display information conveying information to be displayed by the at least one display element of each display module is superimposed over

power signals communicated among the plurality of display modules via the at least two connectors of each display module.

24. (original) The display of claim 20, wherein each display module further comprises a radio frequency (RF) transmitter and/or receiver to send and/or receive display information to be displayed by the at least one display element of the display module.

25. (original) The display of claim 20, wherein each display module further comprises an optical transmitter and/or receiver to send and/or receive display information to be displayed by the at least one display element of the display module.

26. (original) The display of claim 20, wherein at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and connectable to other of the plurality of display modules while power is being provided to the plurality of display displays.

27. (original) A display module for a multiple-display module display comprising:
a housing having a front, at least two first sides, and at least two second sides;
at least one display element viewable from the front of the housing, each of a plurality of pixels of the display corresponding to at least one of the display elements;
at least two connectors mounted on the first sides of the display module to at least receive power from and send power to first adjacent display modules of the display, the display module interlockable with the first adjacent display modules; and,
at least two receptors mounted on the second sides of the display module and receptive to connectors of second adjacent display modules of the display, the display module interlockable with the second adjacent display modules.

28. (original) The display module of claim 27, further comprising a communication mechanism to at least one of receive display information and send display information.
29. (original) The display module of claim 28, wherein the display module is a master display module to communicate the display information to each of other display modules of the multiple-display module display to be displayed by the other display module.
30. (original) The display module of claim 29, wherein the display module determines a configuration of each display module of the multiple-display module display.
31. (original) The display module of claim 29, wherein the display module receives a configuration of each display module of the multiple-display module display from a user.
32. (original) The display module of claim 28, wherein the communication mechanism is to receive the display information from a master display module of the multiple-display module display for the at least one display element to display.
33. (original) The display module of claim 28, wherein the display information is superimposed over power signals on the at least two connectors.
34. (original) The display module of claim 28, further comprising at least two additional connectors mounted on one of the first sides and the second sides of the display module to at least receive display information to be displayed by the at least one display element.
35. (original) The display module of claim 28, wherein the communication mechanism is one of: a radio frequency (RF) receiver, and an optical receiver.

36. (original) The display module of claim 27, further comprising a control mechanism to at least automatically self-determine a configuration of the display module relative to other display modules of the multiple-display module display.

37. (original) The display module of claim 27, wherein the housing is rectangular in shape.

38. (original) A system comprising:

a display information source to generate display information; and,

a display to display the display information and having a plurality of interlockable display modules to each display a portion of the display information and connectable to one another by at least two connectors of each display module that at least distribute power among the plurality of display modules.

39. (original) The system of claim 38, wherein the display information source conveys the display information to a designated display module of the plurality of display modules.

40. (original) The system of claim 39, wherein the designated display module conveys the display information to each other of the plurality of display modules, such that each display module determines the portion of the display information the display module is to display.

41. (original) The system of claim 39, wherein the designated display module determines the portion of the display information that each display module is to display and conveys the portion of the display information that each display module is to display to the display module.

42. (original) The system of claim 38, wherein the plurality of display modules self-determines a configuration of each display module relative to other of the plurality of display modules.

43. (original) The system of claim 38, wherein the display information is conveyed among the plurality of display modules over power signals communicated among the plurality of display modules via the at least two connectors of each display module.

44. (original) The system of claim 38, further comprising a wireless transmitter to transmit the display information, each display module having a wireless receiver to receive the display information.

45. (original) The system of claim 44, wherein the wireless transmitter is part of the display information source.

46. (original) The system of claim 44, wherein the wireless transmitter is part of one of the plurality of display modules.

47. (original) The system of claim 44, wherein the wireless transmitter is external to the display information source and the plurality of display modules.

48. (original) The system of claim 44, wherein the wireless transmitter conveys all the display information to each display module, such that each display module is responsible for determining which of the display information the display module is to display based on a configuration of the display module relative to other of the plurality of display modules.

49. (original) The system of claim 44, wherein the wireless transmitter conveys to each display module a portion of the display information to be displayed by the display module.

50. (original) The system of claim 38, wherein at least one of the plurality of display modules are hot pluggable, such that the at least one display module are disconnectable from and

connectable to other of the plurality of display modules while power is being provided to the plurality of display modules.

51. (original) A system comprising:
a display information source to generate display information; and,
modular, interlocking means for displaying the display information,
wherein the display information is distributed among the means and power is distributed among the means.
52. (previously presented) A method comprising:
receiving display information from a display information source by a designated display module of a plurality of interlockable display modules of a display;
conveying the display information to other of the plurality of display modules by the designated display module;
displaying a portion of the display information by the designated display module based on a configuration of the designated display module relative to the other of the plurality of display modules; and,
distributing power among the plurality of interlockable display modules of the display.
53. (original) The method of claim 52, wherein conveying the display information to the other of the plurality of display modules by the designated display module comprises conveying all the display information to the other of the plurality of display modules, such that each display module is responsible for determining a portion of the display information to be displayed by the display module based on a configuration of the display module relative to the other of the plurality of display modules.
54. (original) The method of claim 52, wherein conveying the display information to the other of the plurality of display modules by the designated display module comprises determining by the

designated display module a portion of the display information to be displayed by each display module.

55. (original) The method of claim 52, further comprising the designated display module determining a configuration of each display module relative to the other of the plurality of display modules.

56. (original) The method of claim 52, further comprising the designated display module receiving from each display module a configuration of the display module relative to the other of the plurality of display modules.

57. (original) The method of claim 52, further comprising the designated display module receiving from a user a configuration of the display module relative to the other of the plurality of display modules.

58. (original) A method:
providing a plurality of interlockable display modules, each having at least two connectors mounted on sides thereof to at least receive power from and provide power to adjacent display modules, and at least two receptors mounted on sides thereof that are receptive to connectors of the adjacent display modules; and,
connecting the plurality of interlockable display modules together to form a display having a configuration.

59. (original) The method of claim 58, further comprising providing power to a designated one of the plurality of display modules, such that other of the plurality of display modules receive and provide power over the connectors thereof.

60. (original) The method of claim 58, further comprising providing display information to be displayed by the display, each display module displaying a portion of the display information.

Evidence Appendix

(No evidence was submitted pursuant to Rules 130, 131, and 132, and therefore, this section is blank.)

Related Proceedings Appendix

(There are no related proceedings to this patent application, and therefore, this section is blank.)